Chapter 25.5

WATER CONSERVATION*

Art. I. In General, §§ 25.5-1-25.5-15

Art. II. Conservation of Water Supplies, §§ 25.5-16-25.5-28

ARTICLE I. IN GENERAL

Sec. 25.5-1. Purpose.

This chapter is intended to promote reasonable conservation of water in the County of San Mateo consistent with maintaining a comfortable standard of living and a healthy economy. It provides a framework for the orderly and timely implementation of reasonable water conservation measures by the different elements of the county's economy. This chapter also carries out certain provisions of the Water Code of the State of California as embodied in article XIV, section 3 of the Constitution of the State of California, which states that maximum beneficial use of the water resources of the state is necessary to prevent the waste or unreasonable use, or unreasonable method of use, of water. This chapter further implements the provisions of the conservation element of the Comprehensive Water Resources Management Plan for San Mateo County as adopted on June 20, 1978.

It is recognized that stricter water conservation measures may be necessary during a future drought or water shortage emergency. Such further measures should not penalize water users for past conservation practices, nor should implementation of water conservation measures constitute a new basis to determine future reductions in case of a declared water shortage emergency. No provision in this chapter is intended to supersede any rule or regulation of the Public Utilities Commission of the State of California. (Ord. No. 687, § 1(Art. I), 2-10-81)

Secs. 25.5-2- 25.5-15. Reserved.

ARTICLE II. CONSERVATION OF WATER SUPPLIES

Sec. 25.5-16. Definitions.

The following words and terms as used in this chapter shall have the following meanings:

Applied Water: Water delivered to a user. Also called delivered water. Applied water may be used for either inside uses or for outside watering. It does not include precipitation or distribution losses. It may apply to metered or unmetered deliveries.

Commercial Establishment: Establishments providing services, engaged in the fabrication of structures or other fixed improvements, or otherwise occupied in nonmanufacturing profit-motivated activities. Examples are retail stores, restaurants, entertainment facilities and home building concerns.

Commercial Water Use: Water used by a commercial establishment.

Domestic Use: All inside and outside uses of water associated with residential use; water used by commercial and industrial establishments other than in their product manufacture.

Establishment: An economic unit which produces goods or services, such as a farm, a factory, or a store. In most instances, the establishment is in a single physical location, and is engaged in only one, or predominantly one, type of economic activity.

Evapotranspiration (ET): The process of water returning to the atmosphere through evaporation from land and water surfaces and through transpiration of plants.

*Editor's note—Ord. No. 687, § 1, adopted Feb. 10, 1981, added Ch. 29, §§ 29-1—29-13. In order to maintain the alphabetical sequence of chapters, the editor has redesignated the provisions as Ch. 25.5. For convenience' sake, the history note will include the section number as originally promulgated as Ch. 29.

Farm Ditch Efficiency: The percent of the total volume of water supplied to the farm which is applied to the field (a measure of distribution losses).

Flat Rate Water: Water sold to customers at a fixed rate irrespective of quantity used.

Industrial Establishment: An establishment engaged in the mechanical or chemical transformation of inorganic or organic substances into new products, and usually described as plants, factories or mills, which characteristically use power-driven machines and material-handling equipment. Establishments engaged in assembling component parts of manufactured products are also considered manufacturing establishments if the new product is neither a structure nor other fixed improvement.

Industrial Water Use: Water used by an industrial establishment in the process of their product manufacture.

Inside Water Use: That part of the water delivery used within a home, commercial establishment or manufacturing establishment for any purpose; also called internal water use.

Leaching Requirement (LR): The fraction of the irrigation water that must pass through the root zone in order to prevent soil salinity from reaching a level that would result in reduced growth to crops, trees, gardens or landscape plants.

Metered Water: Water sold to customers on the basis of actual measured use; does not include losses in distribution.

Net Water Use: The sum of delivered water consumptively used or otherwise not recoverable.

Outside Water Use: The use of water for irrigation of gardens, lawns and ornamental shrubs, and for replenishing swimming pools, fountains, ponds, car washing, etc.; also called external water use.

Pool Cover: An installation over or on a swimming pool and a hot tub which is used to minimize water evaporation.

Precipitation: The total measurable supply of all natural forms of water falling on the land area, including dew, rain, mist, snow, hail and sleet; usually expressed as depth of Supp. No. 5

liquid water on a horizontal surface on a daily, monthly or yearly basis.

Public Facilities: All structures, parks and public places, other than open space, engaged either in serving the public or in providing a public use.

Public Water Use: Water used associated with public facilities.

Reasonable Use: Reasonable use of water involves the application of sufficient applied water to meet demands of a designated beneficial use in a manner consistent with efficiency, public health and sanitation concerns, current technology and local economic conditions. During dry years, practical and economically feasible means should be taken to minimize applied water use and incidental losses. During periods of normal water supplies, reasonable urban water uses include but are not limited to the following beneficial uses:

- (a) The use of water for interior household purposes to maintain personal standards of cleanliness and sanitation.
- (b) The use of water for exterior household purposes to maintain personal standards of exterior cleanliness, landscaping and recreational facilities.
- (c) The use of water for commercial purposes to maintain the services offered and to satisfy the health, aesthetic and safety needs of both employees and the public.
- (d) The use of water for industrial purposes, including cooling, processing and other production-related needs, and to satisfy health, aesthetic and safety needs of the employees.
- (e) The use of sufficient water to maintain community services, including but not limited to public safety, including fire fighting; schools and institutions; transportation systems; public streets and buildings; water supply; sewage and garbage disposal; recreational and aesthetic enjoyment areas such as parks, swimming pools, lakes, streams, golf courses and landscaping.

Recirculation: The reuse of water within a partially or completely closed system of pipes

and appliances without the benefit of treatment, where its quality, other than its temperature, may not be altered.

Reclaimed Water: The collection and appropriate treatment of used water to bring it to a quality suitable for reuse.

Recycle: The recovery of water suitable for reuse without treatment.

Residential Water Use: All inside and outside uses of water associated with residential areas.

Service Area: The area of land included in the distribution system of a water agency.

Sewage: Waste water from sewage treatment facilities; does not include storm or surface water.

Type of Water Use: A distinction of water use based on either a kind of land use (recreational, residential, commercial, etc.) or on a kind of water use (outside use, personal use, swimming pool use, dishwashing use, etc.).

Unaccounted-For Water: The difference between the quantity of water introduced into the system and the quantity delivered to the eventual consumer; usually expressed as a percentage of water introduced into the system.

Unit Water Use: The average quantity of water used per person, acre, etc., over a specified period of time.

Unreasonable Use (Waste): Failure to take appropriate measures to minimize excess application and incidental losses of water. Examples of waste are excessive runoff from irrigation or from broken plumbing.

Unreclaimable Water: Used water which is uneconomical to reclaim due to its location, physical or chemical quality.

Urban Water Use: The use of water for urban purposes, including residential, municipal, commercial, industrial, recreational, military and institutional classes. The term is applied in the sense that it is a kind of use rather than a place of use. Includes delivered water and unaccounted-for water.

Water Agency: An agency organized, founded or established to produce and distribute water directly or indirectly to customers. Supp. No. 5

Water Application Efficiency: The percentage of the volume of water used in evapotranspiration plus leaching requirements for a specified irrigated area to the total volume applied to that area.

Water Conveyance Efficiency: The percentage of the volume of water delivered to the farm or farms by a conveyance system to the volume of water delivered to the conveyance system at the supply source.

Water Produced: The total water introduced into a system or the sum of applied water and unaccounted- for water. (Ord. No. 687, § 1(29-1), 2-10-81)

Sec. 25.5-17. Metering.

On or after adoption of this chapter, all new water service connections in the city, including detector check meters on private fire protection services, shall be metered. (Ord. No. 687, § 1(29-2), 2-10-81)

Sec. 25.5-18. Public Assistance.

Water-saving devices and information shall be made available by the local water agency. However, the cost of any water-saving device or devices shall be borne by the consumer requesting the device. The local water agency shall also reasonably assist customers to detect leaks and increase the efficiency of applied water. (Ord. No. 687, § 1(29-3), 2-10-81)

Sec. 25.5-19. Waste.

Unreasonable use of water is prohibited. Upon written notification to the user by the water agency, all unreasonable use of water shall be terminated; and any required repairs to broken or defective plumbing, sprinkler, watering or irrigation device shall be made within five (5) calendar days or water service to the user may be terminated until corrective measures are taken. (Ord. No. 687, § 1(29-4), 2-10-81)

Sec. 25.5-20. Pool and Hot Tub Covers.

Covers shall be required for all new swimming pools and hot tubs and encouraged to be installed for existing pools. (Ord. No. 687, § 1(29-5), 2-10-81)

Sec. 25.5-21. Residential Water Pressure.

Except for fire protection service lines, a pressure-reducing valve, or valves, that will limit the static water pressure to any internal water outlet of the structure to eighty (80) pounds per square inch gauge, shall be installed in all new residential structures or those existing residential structures requiring a plumbing permit for modification of or addition to the existing plumbing. (Ord. No. 687, § 1(29-6), 2-10-81)

Sec. 25.5-22. New or Remodeled Structures.

The following shall be installed in all new or remodeled residential, commercial or industrial structures:

- (a) Insulation of newly installed hot water pipes where such piping is located in attics, garages, crawl spaces or unheated spaces other than between floors or in interior walls, to provide a maximum heat loss of fifty (50) Btu per hour per linear foot for piping up to and including two (2) inches in diameter, and one hundred (100) Btu per hour per linear foot for all sizes greater than two (2) inches in diameter;
- (b) If newly installed or replaced, tank toilets utilizing not more than three and one-half (3½) gallons of water per flush action;
- (c) If newly installed or replaced, pressure-reducing devices, or flow restrictors to limit the flow of water consistent with the intended use. (Ord. No. 687, § 1(29-7), 2-10-81)

Sec. 25.5-23. Pressure-Reducing Valves.

In new or remodeled commercial or industrial structures requiring a plumbing permit, a pressure-reducing valve, or valves, to limit the static water pressure to eighty (80) pounds per square inch gauge to the upper floor of the structure, shall be installed only if no supplemental internal pumping is anticipated. The intent of this section is to limit available water pressure to the structure consistent with uses of water on the premises. (Ord. No. 687, § 1(29-8), 2-10-81)

Sec. 25.5-24. Vehicle Washing.

Any new or remodeled vehicle-washing facility requiring a plumbing permit, which utilizes more than twenty-five (25) gallons of water per vehicle, shall have a waste water recycling system. (Ord. No. 687, § 1(29-9), 2-10-81)

Sec. 25.5-25. Recirculation.

Two (2) years from the effective date of this chapter, no use of water will be permitted where recirculation of the water is economically, technically and hygienically feasible in all new, commercial or industrial structures.

An economically feasible recirculation installation is defined as, over the useful life of the equipment to be installed, a system where the present worth of the cost of the water saved is more than the present worth of both the capital, and the annual operation and maintenance costs. Such economic and technical feasibility shall be prepared by the user, with the determination of feasibility made by the city council. (Ord. No. 687, § 1(29-10), 2-10-81)

Sec. 25.5-26. Landscaping.

Landscaping of new developments or of any open area, such as parks, playgrounds and golf courses, shall be planned to conserve water through choice of plants, landscape design and irrigation techniques. It shall be the responsibility of the developer and the city to assure that the following water-saving concepts are incorporated into landscape plans; Evapotranspiration rates for different plantings, infiltration rates of applied water on different soil types and land areas with varying degrees of slope, and efficiency of application and distribution system to be used.

The development and utilization, within legal constraints, of the following water-saving techniques shall be encouraged with consideration given to the economic and aesthetics of the different situations:

- (a) Utilization of drought-tolerant plants.
- (b) Utilization of water application systems that are controlled to produce a high percentage of water application effi-

- ciency consistent with the needs of the given plant or plants in each situation (for example, drip irrigation systems, low-delivery sprinkler nozzles, etc.).
- (c) Utilization of reclaimed waste water for irrigation when water quality, environmental, public health and economic conditions permit such use.
- (d) Collection and reuse of runoff water where possible. (Ord. No. 687, § 1(29-11), 2-10-81)

Sec. 25.5-27. Agriculture.

In determining the reasonable beneficial use of irrigation water for field agriculture, local custom should be considered and perhaps modified according to evapotranspiration rates for different crops, infiltration rates of applied water on the different soil types and land areas with varying degrees of slope, and water application efficiency and distribution system available. The development and utilization, within legal constraints, of the following water saving techniques shall be encouraged, with consideration given to the economics of the various agricultural enterprises. These concepts shall be encouraged by advisory and regulatory agencies as follows:

(1) Field agriculture:

- (a) Utilization of an efficient irrigation system suited to the conditions with the scheduling of irrigations according to plant requirements.
- (b) Use of reclaimed waste water to irrigate field-grown flowers and ornamentals when water quality, environmental conditions, public health and economic considerations permit such use.
- (c) Adjustment of planting schedules and amounts to projected water supply.
- (d) Construction of on-farm reservoirs to collect winter runoff and increase water storage.

- (e) Collection and recycling of runoff water where possible.
- (f) Encouragement of cooperation between riparian and nonriparian users who share a stream water supply.

(2) Greenhouse culture:

- (a) Utilization of an efficient irrigation system suited to the conditions.
- (b) Construction of reservoirs to catch runoff water from greenhouse rooftops and adjoining areas.
- (c) Construction of catch basins with return pumping systems to collect and recycle drainage water from plants grown inside the greenhouse, if the quality is satisfactory.
- (d) Collection and use of rainfall and runoff from adjoining farm lands. (Ord. No. 687, § 1(29-12), 2-10-81)

Sec. 25.5-28. Shortages.

Notwithstanding the foregoing relating to conservation of water supplies, it is apparent that in times of a declared water shortage emergency pursuant to Section 350 et seq., of the Water Code of the State of California, certain additional mandatory water conservation practices will be necessary. It is the intent of this chapter that after allocating and setting aside the amount of water which in the opinion of the governing body will be necessary to supply water needed for domestic use, sanitation and fire protection, the emergency regulations shall establish priorities in the use of water for other purposes and shall provide for the allocation, distribution and delivery of water for such other purposes, without discrimination between consumers using water for the same purpose or purposes. Regulations so adopted shall not penalize water users for past conservation practices. (Ord. No. 687, § 1(29-13), 2-10-81)